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- (54) Data management system for programming-limited type semiconductor memory and IC memory card having the data management system
- (57) In a data management system for a programming-limited type semiconductor memory (M) which is programmable a limited number of times and which includes a plurality of storage areas, a management unit (1) manages, for each of the storage areas, the number of times that programming has been performed. A control unit (2) selects one of the storage areas for which programming has been performed the smallest number of times and has input data is written into the selected one of the storage areas, so that all the storage areas can be equally programmed.

FIG.7

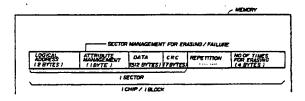
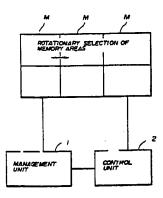


FIG. I





EUROPEAN SEARCH REPORT

Application Number EP 95 11 3545

| ategory | DOCUMENTS CONSID Citation of document with indi- of relevant passa | cation, where appropriate, | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.CL5) |
|---------|---|--|---|---|
| (| US-A-4 780 855 (IIDA | ET AL) | 1,2,10, | G11C16/06 G06F3/06 |
| A | * column 2, line 41 - figures 1-5 * | column 6, line 40; | 3,12 | · |
| A | EP-A-0 392 895 (SUND | ISK CORPORATION) | 1-3,6,7, 10-12, 15,16,18 | |
| | * column 4, line 55 figures 1B-3A * * column 9, line 36 figure 5 * | | | |
| P,A | EP-A-0 477 503 (FUJI | • | 1-5, 10-14 | |
| | * column 5, line 1 - figures 1-9 * | column 11, line 1; | | |
| P,A | EP-A-0 492 450 (FUJI | PHOTO FILM CO. LTD. | 8-14,17, | |
| | | | 19 | TECHNICAL FIELDS SEARCHED (Int.Cl.5) |
| | * column 4, line 50 figure 2 * * column 9, line 35 figure 5 * | - column 11, line 8; | | G11C G06F |
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| | The present search report has b | een drawn up for all claims | | |
| | Place of search | Date of completion of the sea | L. | Examiner |
| | THE HAGUE | 30 September | 1996 Cu | mmings, A |
| Y: | CATEGORY OF CITED DOCUMES particularly relevant if taken slone particularly relevant if combined with and document of the same category technological background | NTS T: theory or E: earlier pa after the other D: document L: document | principle underlying t tent document, but pu- illing date cited in the applicati cited for other reason | on |